Ultrasound Efficacy in Diagnosing Hamstring Injuries

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INTRODUCTION: While MRI is the gold standard for diagnosing hamstring injuries, its routine use is impractical due to cost and accessibility. Ultrasound, being simple and minimally invasive, has gained attention as an alternative diagnostic tool. This study aims to evaluate the diagnostic accuracy of ultrasound in detecting hamstring injuries.
METHODS: We conducted a retrospective review of medical records from July 2018 to August 2022. Patients who were suspected of having hamstring injuries underwent ultrasound examinations followed by MRI. MRI findings were used as the reference standard to determine the sensitivity and specificity of ultrasound.
RESULTS: A total of 166 patients (152 males, 14 females; average age 21 years) were included. MRI confirmed hamstring injuries in 121 patients. The overall sensitivity and specificity of ultrasound were 81% and 76%, respectively.
DISCUSSION AND CONCLUSION: The primary limitation of ultrasound in diagnosing hamstring injuries is the inability to accurately visualize the injury site. It is often observed that the site of pain reported by patients does not correspond to the actual location of the injury. Despite this, ultrasound remains a valuable diagnostic tool for hamstring injuries. To enhance diagnostic accuracy, clinicians should routinely examine common sites of hamstring injuries irrespective of patient-reported pain locations.